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ABSTRACT

Critical thinking is defined as the ability and willingness to be objective, impartial, and non-arbitrary, based on evidence. It is crucial to ethical instruction, study of theory, teaching methods, and training in skills or abilities. There are three reasons why critical thinking is an educational ideal: (1) it influences teachers to respect students' rights to question and challenge instruction; (2) it prepares students for self-sufficiency as adults; and (3) it introduces rational traditions of science, history, literature, the arts, and mathematics. A possible argument against the justification of critical thinking as an educational ideal is that all educational ideals are political in two senses: every educational ideal has political ramifications; and every educational ideal is politically biased, and so the acceptance of any ideal is a function of prior political commitment. These arguments fail because educational ideals can be independently supported on both moral and educational grounds. Practical and philosophical topics for research are suggested. (CP)

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Critical Thinking As An Educational Ideal *

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Critical Thinking As An Educational Ideal[1]

Many philosophers and philosophers of education take critical thinking to be a central ideal of educational endeavor. Israel Scheffler, for example, holds that "...critical thought is of the first importance in the conception and organization of educational activities."[2] Karl R. Popper takes critical thinking to be not only a fundamental educational ideal, but the very hallmark of serious intellectual activity (especially scientific activity): "...criticism and critical discussion are our only means of getting nearer to the truth."[3] If these thinkers applaud the notion of critical thought, however, there are also those, for example Thomas S. Kuhn, whose work suggests that critical thought is not all its proponents claim for it.[4] What we are to make of this morass of contradictory views is not clear; however, the centrality of the notion of critical thought as an educational ideal necessitates serious treatment of the problem. What is the status of the ideal of critical thinking? This is the question addressed in the present paper. In what follows I shall try, first, to say just what critical thinking is; what the ideal comes to. Then, I will examine the <u>justifiability</u> of critical thinking: given a clear account of the notion, on what grounds (if any) can critical thinking be defended as an educational ideal? This will lead to a consideration of one conspicuous argument against the ideal of critical thought--namely, that it is to be rejected on <u>political</u> grounds, as an ideal which cannot be justified on non-political grounds, and which masks unacceptable political assumptions. Finally, I

will suggest ways in which educational scholars can derive some practical utility from the conception of critical thinking presented.

What Is Critical Thinking?

What is it, then, for a child to be a critical thinker? What abilities, skills, attitudes, habits and traits does a critical thinker possess? And what larger conception do these possessions find their niche in? First and foremost, the larger conception is that of rationality: critical thinking is best thought of as an embodiment of the ideal of rationality. Rationality in turn is to be understood as being "coextensive with the relevance of reasons."[5] A critical thinker is one who recognizes the importance, and convicting force, of reasons. When assessing claims, evaluating procedures, or making judgments, the critical thinker seeks reasons on which to base her assessment, evaluation, or judgment. Moreover, to seek reasons is to recognize and commit oneself to principles governing such activity. Critical thinking is, thus, principled thinking. Judging according to principle entails judging non-arbitrarily, since arbitrary judgments are not principled; impartially, since partial judgments likewise fail to be principled; and objectively, for the same reason. Principled judgment, in its rejection of arbitrariness, partiality, and non-objectivity, thus recognizes the existence of, and utilizes to its own end, impartial, objective standards in accordance with which judgments are to be made. Logical criteria governing proper inference, as well as criteria governing the assessment of empirical evidence, are relevant here. The critical thinker seeks reasons to guide and control judgment, and such reasons must accord with the principles ensuring proper control. Critical judgment must, therefore, be objective, impartial, non-arbitrary, and based

on evidence of an appropriate kind and properly assessed.[6]

A critical thinker is a thinker who can assess claims and make judgments on the basis of reasons, and who understands and conforms to principles governing the evaluation of the force of those reasons. To educate critical thinkers, then, we need to teach students how reasons are assessed, what principles govern such assessment, and why (we think) such principles are to be adhered to. Suppose a student masters all this--that is, can properly evaluate a statement S, can give reasons supporting that evaluation (for example, by citing relevant evidence), and can demonstrate understanding of the principles governing the evaluation (for example, by pointing out that the reasons given in support of the evaluation are objective, impartial, and conform to appropriate standards of logical rigor and empirical support). Can we say that this student is a critical thinker? Unfortunately no, although such a student is surely well on the way to becoming a critical thinker. What is missing? What else must a student have, besides skill at evaluating statements, an understanding of the importance of reasons in such evaluation, and a grasp of the principles underlying such reasons, in order to be a critical thinker?

In order to be a critical thinker, a student must have, in addition to what we have said thus far, certain attitudes, dispositions, habits, and character traits, which together may be labelled the critical spirit or critical attitude. It is not enough for a student to be able to evaluate claims on the basis of evidence, for example; a student, in order to be a critical thinker, must be disposed to do so. A critical thinker must have a willingness to conform judgment to principle, not simply an ability to so conform. One who possesses the critical spirit has a certain character as well as certain skills: a character which is inclined to seek reasons; which

rejects partiality and arbitrariness; and which is committed to the objective evaluation of relevant evidence. A critical attitude demands not simply an ability to seek reasons, but a commitment to seek reasons; not simply an ability to judge impartially, but a willingness to so judge, even when impartial judgment is not in one's self-interest. A possessor of the critical spirit is inclined to seek reasons and evidence; to demand justifications; to query and investigate unsubstantiated claims. Moreover, a critical spirit possesses habits of inquiry and assessment consonant with the considerations sketched above: a critical spirit habitually seeks evidence and reasons, and is predisposed to so seek.[7]

A noteworthy aspect of critical thinking (which henceforth is to be understood as including critical spirit) is its generality. Critical thinking is relevant to, and has implications for, the ethics of education as well the epistemology of education; and touches the manner as well as the content of education. It will be worthwhile to spell out this generality in some detail.

Critical thought is crucial to the ethics of education in at least two ways. First, ethical considerations arise in educational contexts in that how we teach--the manner of teaching--has an ethical as well as an intrumental side. We want to teach effectively, so that learners stand a good chance of learning; however, our methods of instruction must meet certain moral standards if they are to be acceptable. For instance, instructional methods which call for physical or psychological abuse of the learner are morally objectionable, no matter how effective. How critical thinking is tied up with the manner of teaching will be dealt with directly; this is the first way in which critical thinking is linked with

the ethics of education. The second way concerns the learner's moral education. Educators are bound, both morally and practically, to contribute to the moral education of the learner. Exactly how moral education is to proceed is a matter of some dispute, but it is clear that the learner's moral education should include, at least, instruction aimed toward the inculcation in the student of certain intellectual habits and dispositions, and certain reasoning skills, necessary for the learner to reach moral maturity. For example, moral education must seek to develop in the child a willingness to face moral situations impartially rather than self-interestedly, for adequate moral behavior demands such impartiality. Likewise, a morally mature person must recognize the centrality and force of moral reasons in moral deliberation, and moral education must seek to foster that recognition. Such "rational virtues" as impartiality of judgment and recognition of the force of reasons, to name just two such virtues, are indispensable to moral education; they are also, we have seen, central aspects of critical thinking. Here, then, is the second way in which critical thinking is relevant to the ethics of education.[8]

Equally ramified by critical thinking is the epistemology of education. A learner is, if she is successfully educated, expected to come to know certain things. The "items of knowledge" a learner is expected to come to know are tremendously diverse, from simple "facts" to complex theories. Such facts and theories are, moreover, to be understood as well as known: it is not enough simply to know (in the sense of being able to repeat) the axioms of Euclidean geometry, for example; the learner is expected to understand them as well (as evidenced by, for example, the ability to utilize them correctly in proving theorems). Such knowledge and understanding demands, among other things, a proper understanding of the relevance of reasons and rules of

inference and evidence: without understanding the way in which the parallel line axiom affords a reason for taking theorem X to be true, the learner cannot be said to fully understand either the axiom or theorem X. Moreover, the principles governing the correct assessment of inference and evidence are themselves important features of the curriculum. The learner, that is to say, may profitably study canons of argument and scientific evidence appraisal in their own right as objects of study, as well as master them in order to understand other bits of knowledge whose understanding depends on such mastery. Such items of the curriculum, then, are central to the education of the learner, for to grasp the connection between premise and conclusion or evidence and conclusion is to understand the way in which premises and evidence provide reasons for conclusions, and to understand the role of reasons in judgment is to open the door to the possibility of understanding conclusions, and knowledge-claims, generally. And, as we have seen, the import of reasons is a central feature of critical thinking. Here, then, is the way that critical thinking is relevant to the epistemology of education.

Intertwined with aspects of the ethics and epistemology of education are the content and manner of education. We can usefully divide the realm of education into two distinct parts: the content of education, which includes all that educators seek to impart to their students; and the manner of education, which includes the ways in which educators try to impart that content. Critical thinking has ramifications for both of these domains; to spell out these ramifications, and so to show in another way the generality of critical thinking, we now turn.

Perhaps most significant are the connections between critical thought and the manner of teaching--the critical manner. The critical manner is that manner of teaching that reinforces the critical spirit. A teacher who

utilizes the critical manner seeks to encourage in her students the skills, habits, and dispositions necessary for the development of the critical spirit. This means, first, that the teacher always recognizes the right of the student to question, and demand reasons; and consequently recognizes an obligation to provide reasons whenever demanded. The critical manner thus demands of a teacher a willingness to subject all belief and practices to scrutiny, and so to allow students the genuine opportunity to understand the role reasons play in justifying thought and action. The critical manner also demands honesty of a teacher: reasons presented by a teacher must be her genuine reasons; and a teacher must honestly appraise the power of those reasons. In addition, the teacher must submit her reasons to the independent evaluation of the student:

> To teach...is at some points at least to submit oneself to the understanding and independent judgment of the pupil, to his demand for reasons, to his sense of what constitutes an adequate explanation. To teach someone that such and such is the case is not merely to try to get him to believe it: deception, for example, is not a method or a mode of teaching. Teaching involves further that, if we try to get the student to believe that such and such is the case, we try also to get him to believe it for reasons that, within the limits of his capacity to grasp, are our reasons. Teaching, in this way, requires us to reveal our reasons to the student and, by so doing, to submit them to his evaluation and criticism.[9]

Teaching in the critical manner is thus teaching so as to develop in the students skills and attitudes consonant with critical thinking. It is, as Scheffler puts it, an attempt to initiate students "into the rational life, a life in which the critical quest for reasons is a dominant and integrating motive."[10] Here reasons, rationality and manner of teaching come together in the critical manner. Teaching in the critical manner is thus perhaps the clearest way in which the ideal of critical thinking appropriately guides educational practice.

Critical thinking is relevant to the content as well as the manner of teaching. Accepting Ryle's distinction between knowing how and knowing that[11], educational content includes both the training of skills and specific abilities (knowledge how), and propositional information (knowledge that). Critical thinking is relevant to both these types of knowledge.

Critical thinking is a major skill and general ability which education seeks to foster. As such, it is part of the "knowledge how" of educational content. We want students to be critical thinkers, and we seek to develop in them skills to that end, much as we seek to develop their reading, spelling, and computational skills. We also try to inculcate in students attitudes, dispositions, and habits likely to improve both their ability to think critically, and their inclination to do so. That is to say, we seek to instill in students the critical spirit, in that we try to give them both the skills and abilities, and attitudes and habits of mind which constitute that spirit. And since these skills, attitudes and habits fall under the general heading of "knowledge how", we may say that critical thinking is part of the "how" of our educational content.

Critical thinking also falls under the "knowledge that" portion of educational content. For we want to get students to be able to think critically, and that means, at least in part, getting them to understand what the rules of assessment and criteria of evaluation of claims are. We want students to learn, for example, the methodological criteria underlying our judgments that such-and-such piece of evidence supports claim X, but that another bit does not support claim Y. We want students to learn how to apply such criteria; this, we have seen, is part of the way in which critical thinking concerns the "knowledge how" portion of educational content. But we also want students to

be able to reflect on these criteria and perhaps improve them; and we want students not simply to apply them blindly, but to understand their point, the justification of claims that they offer, and the higher-order justifications of them as legitimate criteria of assessment and evaluation that we can offer in their behalf. All this is part of our educational content of the "knowledge that" sort. So, critical thinking is an important part of the content of education, touching both the "knowledge how" and "knowledge that" portions of that content.

We have seen thus far that critical thinking has ramifications for both the ethics and the epistemology of education; and for both the manner and content of education. These ramifications are numerous, varied, and wide-ranging, and demonstrate the impressive generality of critical thinking as an educational ideal. Before we conclude this section of the present paper, on the explication of the ideal of critical thinking, and turn to the next section, on the justification of that ideal, one more topic must be briefly dealt with. That is this: in what sense is critical thinking an educational ideal? What sort of ideal is it?

Critical thinking, we shall maintain, is a regulative ideal. It defines regulative standards of excellence, which can be used to adjudicate between rival educational policies and practices. We have spelled out above some of the components of critical thinking: certain skills, attitudes, habits and dispositions on the part of the learner; and certain sorts of teaching practice ("manner") on the part of the teacher. To say that critical thinking is an educational ideal is to say that the notion of critical thinking, or its constituent components, can and should be used as a basis from which to judge the desireability of various features of or proposals for the educational enterprise. (This suggestion will be more concretely, if briefly, dealt

with in the final section of this paper.) Of two rival teaching methods T1 and T2, for example, according to the regulative ideal of critical thinking whichever of T1 and T2 conforms better to the manner of teaching described above is prima facie more desirable and ought to be chosen. Similarly, of two educational practices P1 and P2, whichever tends to develop in students those habits, character traits, skills and dispositions central to critical thinking (as described above) is prima facie more desirable and ought to be chosen. Critical thinking regulates our judgments and provides standards of excellence on which to base such judgments of educational practice, and so is usefully called a regulative ideal. It can help us choose between rival educational theories or "paradigms."[12]

The Justification Of Critical Thinking As An Educational Ideal

Up to this point, I have been largely concerned with explicating the ideal of critical thinking. That is, I have been attempting to say just what the conception comes to, and to clarify the sense in which it is an educational ideal. Now we must face another problem: namely, how is the ideal of critical thinking justified? What reasons do we have for accepting the ideal? Why is critical thinking a worthwhile educational ideal? On what grounds can critical thinking be shown to be an acceptable, appropriate educational guide? Since the ideal is of great significance, in that serious acceptance of it would affect all our educational judgments and so color all our educational policies and practices, it is crucially important that there be good reasons for accepting critical thinking as our educational ideal. In what follows, I shall present three such reasons. Each, I believe, offers significant justificatory support for critical thinking; together they offer as much justification as can reasonably be demanded of any purported ideal.

(1) The first reason is relevant primarily to the justification of that portion of critical thinking which has to do with the manner of teaching. That is, it purports to justify the claim that our manner of teaching ought to accord with the critical manner. We ought to teach in accordance with the critical manner because, simply put, it would be immoral to teach in any other way. Why? Because teaching is an interaction between persons, and all such interactions ought to conform to certain general requirements binding on all interpersonal interactions. For example, we must, if we are to conduct our interpersonal affairs morally, recognize and respect the fact that we are dealing with other persons who as such deserve respect--that is, we must show respect for persons. This includes the recognition that other persons are of equal moral worth, which entails that we treat other persons in such a way that their moral worth is respected. This in turn requires that we recognize other persons' needs, desires, and legitimate interests to be as worthy as our own; and that, in our dealings with other persons, we do not grant our own interests any more weight, because they are our interests, than any other persons' interests. The concept of respect for persons is a Kantian one, for it was Kant who urged that we treat others as ends, and not means.[13] This entails recognizing the equal worth of all persons; and such worth is the basis of the respect all persons are due.

For present purposes, it is important to note that respect for persons has ramifications far beyond the realm of education. All persons, in all situations, deserve respect. This general point includes educational situations, since educational situations involve persons. Here is the relevance of the Kantian conception of respect for persons to education. It is also worth pointing out that the obligation to treat students with respect is independent of more specific educational aims. It is an obligation binding on us

generally; and so is not part of any particular educational setting or system. Whatever else we are trying to do in our educational institutions, we are obliged to treat students with respect.

What does it mean for a teacher to recognize the equal moral worth of students, and to treat students with respect? Among other things, it means recognizing the student's right to question, to challenge, and to demand reasons and justifications for what is being taught. The teacher who fails to recognize these rights of the student fails to treat the student with respect, for treating the student with respect involves, at least, recognizing the student's right to exercise her independent judgment and powers of evaluation. To deny the student this right is to deny the student the status of "person of equal worth". To treat students with respect is, moreover, to be honest with them; to present reasons for believing X, for example, which are the reasons on the basis of which the teacher believes X. To deceive or indoctrinate, or otherwise fool students into believing X, even if X is true, is to fail to treat them with respect.

The general moral requirement to treat persons with respect thus applies to the teacher's dealings with her students simply because those students are persons and so are deserving of respect. It is independent of any specific educational aim. However, it offers justification for taking critical thinking to be a legitimate educational ideal in that the way one teaches, according to the critical manner, is in crucial respects isomorphic to the way one teaches so as to respect students. In both, the student's right to question, challenge, and seek reasons and justifications must be respected. In both, the teacher must deal honestly with the student. In both, the teacher must submit her reasons for taking some claim to be true to the student's

independent judgment and critical scrutiny. In most respects, then, teaching in the critical manner simply is to teach in such a way as to treat students with respect; the obligation to treat students (as a sub-class of persons) with the respect they are due as persons thus constitutes a reason for adopting the critical manner.

It is also plausible to suppose that treating students with respect would help to develop those traits, habits and dispositions which are the cornerstones of the critical spirit. To demand the impartial evaluation of claims, for example, and to encourage students to question, challenge, and sharpen their evaluative and judgmental skills, which respect for persons entails, might well serve to aid in the development of student's willingness and predisposition to question, challenge, and demand reasons. Thus teaching in the critical manner might serve to help develop in students the critical spirit. Whether or not this is the case is a matter of empirical research, and should the ideal of critical thinking be taken seriously, such research would clearly be called for--as would any research concerning the inculcation of the critical spirit (that being a fundamental feature of the ideal). It is important to note, however, that even if it turned out that the critical manner did not help to inculcate the critical spirit, that manner would still be justifiable. It would be justified in terms of the connection, just discussed, between the critical manner and the general obligation to treat all persons, including students, with the respect due them as persons having, from the moral point of view, human worth.

(2) The second reason for taking critical thinking to be a worthwhile educational ideal has to do with education's generally recognized task of preparing students to become competent with respect to those abilities

necessary for successfully managing one's adult life. We educate, at least in part, in order to prepare children for adulthood. But we cannot say in advance that, for example, Johnny will be a pilot, and arrange his education accordingly, for Johnny might well decide to be something else. In general, when we say that education prepares children for adulthood, we do not mean some specific adult role(s). Rather, we mean that education prepares children generally for adulthood. One such general aspect of adulthood is the power and ability to control one's own life. We guide a child's education primarily because the child cannot responsibly guide it herself. But we seek to bring the child, as quickly as possible, to the point where she can "take over the reins" and guide her own education, and life, generally. We seek, that is, to make the child <u>self-sufficient</u>; to <u>empower</u> the student to control her destiny.[14] To get the student to the point where she can competently control her life is to bring the student into the adult community, to recognize the student as a fellow member of a community of equals. To thus empower the student is to raise her, in the most appropriate sense of the term, to her "fullest potential". Indeed, this is a fundamental obligation to children. Without proper education, children would not get to the point where they could competently control their own destinies, for many options would be forever closed to them because of their poor education. To meet our obligation to children to prepare them well for adulthood, we must try to educate them in such a way that they are maximally self-sufficient.

How can we organize educational activities so as to empower the student? My suggestion, predictably enough, is that we organize those activities according to the dictates of critical thinking. For to train students to be critical thinkers is to "encourage them to ask questions, to look for evidence,

to seek and scrutinize alternatives, to be critical of their own ideas as well as those of others."[15] Such encouragement is likely to lead to the student's self-sufficiency, for as Scheffler writes,

> This educational course precludes taking schooling as an instrument for shaping [students'] minds to a preconceived idea. For if they seek reasons, it is their evaluation of such reasons that will determine what ideas they eventually accept.[16]

By encouraging critical thinking, then, we teach the student what we think is right, but we encourage the student to scrutinize the evidence and judge independently the rightness of our claims. In this way the student, hopefully, becomes a competent judge; more importantly, the student becomes an independent judge. That is, the student decides for herself the appropriateness of alternative beliefs, courses of actions, and attitudes. Such independence of judgment is the sine qua non of self-sufficiency. The self-sufficient person is, moreover, in an important sense a liberated person, for such a person is free from the unwarranted control of unjustified beliefs, unsupportable attitudes, and paucity of abilities which can prevent her from competently taking charge of her own life. Critical thinking thus liberates[17] as it renders students self-sufficient. Insofar as we recognize our obligation to prepare children to become competent, self-sufficient adults, that obligation provides a justification for the ideal of critical thinking, for education as conceived along the lines suggested by that ideal recognizes explicitly, and is perhaps likely to satisfy[18], that obligation. Here, then, is our second reason for taking critical thinking to be a legitimate educational ideal.

(3) Finally, we come to the third reason for taking critical thinking to be an educational ideal. As we have seen earlier, critical thinking is best seen as an embodiment of rationality, and rationality is largely concerned with reasons. For a person to be rational, that person must (at least) grasp the

relevance of various reasons for judgment(s) to be made, and evaluate the weight of such reasons properly. How does a person know how to evaluate reasons properly?

A persuasive account of the proper evaluation of reasons suggests that a person learns the proper assessment of reasons by being initiated into the traditions in which reasons play a role. Education, on this view, amounts to the initiation of the student into the central human traditions.[19] These traditions--science, literature, history, the arts, mathematics, and so on--have evolved, over the long history of their development, guidelines concerning the role and nature of reasons in their respective domains. Thus, for example, a prospective scientist must learn, among other things, what counts as a good reason for or against some hypothesis, theory, or procedure; how much weight the reason has; how it compares vis-a-vis other relevant reasons; etc. Science education amounts to initiating the student into the scientific tradition which in part consists in appreciating that tradition's standards governing the appraisal of reasons.

Such appraisal is, moreover, not static: standards of rationality evolve and must be seen as part of a constantly evolving tradition:

> Rationality in natural inquiry is embodied in the relatively young tradition of science, which defines and redefines those principles by means of which evidence is to be interpreted and meshed with theory. Rational judgment in the realm of science is, consequently, judgment that accords with such principles, as crystallized at the time in question. To teach rationality in science is to interiorize these principles in the student, and furthermore, to introduce him to the live and evolving <u>tradition</u> of natural science...
>
> ...Similar remarks might be made also with respect to other areas, e.g. [history], law, philosophy and the politics of democratic society. The fundamental point is that rationality cannot be taken simply as an abstract and general ideal. It is embodied in <u>multiple evolving traditions</u>, in which the basic condition holds that issues are resolved by reference to <u>reasons</u>, themselves defined by <u>principles</u> purporting to be impartial and universal.[20]

If we can conclude that education is largely a matter of initiating students into the rational traditions; and if we can agree that such initiation consists in part in getting the student to appreciate the standards of rationality which govern the assessment of reasons, and so proper judgment, in each tradition; then we have a third reason for taking critical thinking to be an educational ideal. Critical thinking, we have seen, recognizes the importance of getting students to understand and appreciate the role of reasons in rational endeavor, and of developing in students those traits, attitudes and dispositions which encourage the seeking of reasons for grounding judgment. Understanding the role of reasons in the several rational traditions is crucial to being successfully initiated into those traditions. If education is seen as initiation into the rational traditions, then, we have a reason for taking critical thinking to be an educational ideal: critical thinking is a legitimate educational ideal because it seeks to foster in students those traits, dispositions and attitudes which are conducive to the successful initiation of students into the rational traditions. Seeing education as initiation thus offers justification for the ideal of critical thinking.

A Political Problem

Before we can conclude that the three reasons offered above justify critical thinking as an educational ideal, it is necessary to consider a possible argument against the ideal.[21] The argument, simply put, is this: All educational ideals, as well as educational policies and practices, are in the end political. Critical thinking is no different from any other educational ideal in this respect. Moreover, that ideal masks unacceptable political assumptions. Therefore critical thinking cannot be justified as an educational ideal.

Is it the case that, so far as education is concerned, "everything is political"? Jonathan Kozol, in his fascirating account of Cuba's recent literacy campaign, argues that it is:

> All learning is ideological in one way or another.... All education, unless it is hopelessly boring and irrelevant, is political.[22]

Such a claim is too ambiguous to straightforwardly evaluate. In order to evaluate it, we must separate out two distinct senses of the phrase "everything is political", as applied to educational ideals:

(a) every educational ideal has political ramifications; and
(b) every educational ideal is politically biased, and so the acceptance of any ideal is a function of prior political commitment. No independent (ie., non-political) support for any educational ideal is possible.

Sense (a) is correct: every educational ideal does have political ramifications, for the simple reason that such ideals help to shape peoples collective attitudes and commitments. Critical thinking, for example, has ramifications undesireable for the fascist, since the attitudes, traits, dispositions, and habits of mind to be fostered under critical thinking would work to undermine the supreme authority of any fascist leader, and similarly undermine the subservience of the populace on which a fascist regime depends. Similarly, the educational ideal (if it can be called such) of the Nazi party would have ramifications undesirable for the democrat, for the attitudes and dispositions to be fostered under that ideal would work to undermine the equal participation and diversity of opinion of the populace necessary for successful democratic government. It is at least plausible, then, that every educational ideal has political ramifications.

The truth of sense (b), however, is not so clear. It does not follow from the fact that all educational ideals have political ramifications that no

independent support for those ideals can be found. Indeed, independent support for educational ideals on moral grounds is both possible and common. Consider, for example, the first reason given above for taking critical thinking to be an educational ideal: that we are morally bound to treat others with respect for their person; to recognize their equal moral worth. Such a principle (of respect for persons), if correct, does not apply only to some political arrangements and not others; if applies "across the board", and governs all interpersonal interactions. Its support derives from general considerations concerning the nature of persons, the world, and morality. Of course the principle might be incompatible with certain political arrangements--eg. respect for persons is incompatible with many forms of fascism and totalitarianism--and so might eliminate those political arrangements as possible moral arrangements. Nevertheless, the principle is itself politically neutral in that it is justified independently of strictly political considerations. One need not adopt some prior political commitment in order to defend the moral principle of respect for persons, or to recognize that principle as binding on all interpersonel, including educational, relationships.[23]

Similarly, independent support for educational ideals on educational grounds is possible. Consider the third reason given above for taking critical thinking to be an educational ideal: that education is a matter of initiating students into the family of rational human traditions. Such a view of education can be argued for independently of political considerations, as Peters [24] tries to do. Of course Peters might be wrong; it is possible that education is not best seen as initiation. But the point at issue here is whether or not the consideration of education as initiation, which may, if correct, provide reason for favoring some particular educational ideal, can even take place without a prior political commitment. It seems clear that it can; Peters can

be defended, or refuted, on educational grounds alone. This is not to say that political considerations cannot be relevant to a discussion of Peters' view of education as initiation, only that such considerations need not be raised. Since educational ideals can be supported on moral, or educational, non-political grounds, I conclude that sense (b) of "everything is political" is false. The argument sketched above, then, which purports to show that critical thinking cannot be defended as an educational ideal because "everything is political", fails, at least if "everything is political" is taken in sense (b).

Moreover, even if sense (b) were to stand, the argument against critical thinking would still fail, for the specific political objection that Kozol, for example, might make--namely, that critical thinking is not revolutionary enough, and merely masks unacceptable political assumptions--is false. Critical thinking, as we noted earlier, is a liberating ideal, so that if, as Kozol says, "Education is either for domestication or for liberation"[25], critical thinking falls decisively on the side of liberation: to educate in accordance with the ideal of critical thinking is to liberate.[26] Consequently, the political objection sketched above does not constitute a problem for the ideal of critical thinking.[27]

Ramifications Of Accepting Critical Thinking As An Educational Ideal

In this final section of the paper, I would like to briefly consider some of the ramifications, both practical and philosophical, of accepting critical thinking as an educational ideal. Practically speaking, taking critical thinking to be an educational ideal has significant ramifications, and suggests several areas of future research:

(a) First, we need to investigate ways of inculcating the character traits, dispositions, and habits of mind making up the critical spirit. Since the inculcation of the critical spirit is a central aspect of the ideal, such research constitutes an important aspect of bringing the ideal into contact with day-to-day educational activities.

(b)Also necessary is research involving the inculcation of the reasoning skills central to critical thinking. Happily, some excellent research along this line has been done[28]; the effort could well be expanded.

(c) As we have seen, the ideal of critical thinking has much relevance for the manner of teaching. The ideal ought, therefore, to be usefully applicable to teacher training programs: both the design and evaluation of such programs could benefit from a systemic application and explication of the ideal as it is relevant to teacher training. Here again further research is called for.

(d) Finally, critical thinking should prove useful in the evaluation of various existing educational programs. For example, Matthew Lipman's Philosophy for Children[29] program is in some respects similar in its aims to programs conceived along the lines of critical thinking. It should be possible to shed light on programs such as Lipman's, and critical thinking, by learning more about the ways such programs do and do not accord with the critical thinking ideal.

Philosophically speaking, the ideal of critical thinking also has interesting ramifications.

(a) First, it could serve to re-open questions concerning the aims of education which do not attract the amount of interest philosophers of education traditionally have paid them. This sort of return to normative philosophy of education would be all to the good, in my opinion.

(b) The ideal also serves to identify those issues of "pure" philosophy

most relevant to philosophy of education. If critical thinking can legitimately be taken to be an educational ideal, and if it is correct that that ideal is best seen in terms of rationality, then the philosophical issues most relevant to the concerns of this paper is that cluster of issues revolving around the notion of rationality. Consider, for example, philosophical debate concerning rationality in science. Popper, Kuhn, Feyerabend, Lakatos, Laudan, and a host of others have turned up several difficulties with the traditional view of rationality in science. The disagreements among these authors are substantial; it is fair to say that there is no general consensus among philosophers of science concerning the nature of rationality in science. The point can be generalized: in philosophy there is no satisfactory detailed account of the nature of rationality. Since the concept of rationality is central to the conception of critical thinking presented thus far, I believe it is safe to say that the philosophical analysis of rationality is crucial to the full explication and justification of the ideal of critical thinking. Therefore, for philosophers of education such as I, who take the task of explicating and justifying (and, ultimately, implementing) critical thinking to be an important one, the task of understanding the concept of rationality generally is an important area of educational, as well as philosophical, research. It may even be (though this is admittedly optomistic) that philosophy of education's attempt to more deeply understand the ideal of critical thinking may shed light on the general philosophical problem of rationality. This would be an unusual and welcome event for philosophy of education, for it is generally thought that philosophy of education is by and large dependent on other, more central branches of philosophy (egs. epistemology and ethics). It would be an unusual and gratifying state of affairs for philosophy of education if, for once, the dependency relation were reversed.

There is much work to be done, both theoretically and practically, if the proposition that critical thinking is an educational ideal is taken seriously. This paper constitutes only a small part of that work.

NOTES

1. What follows is based heavily on the writings of Israel Scheffler. Professor Scheffler has long urged that we endorse critical thinking as a primary educational desiteratum. My treatment of critical thinking is intended, then, not so much as an original treatment, but as a systematization and explication of a notion that has been "in the air" for quite some time. My debt to Professor Scheffler is large; my gratitude and appreciation equally so.

2. Israel Scheffler, Reason and Teaching, (N.Y.: Bobbs-Merrill, 1973), page 1.

3. Karl R. Popper, "Back to the PreSocratics", in Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, (N.Y.: Harper & Row, 1965), p. 151.

4. The central reference to Kuhn is his The Structure of Scientific Revolutions, 2nd edition, enlarged (Chicago: University of Chicago Press, 1970). I have discussed the general relationship between Kuhn and the ideal of critical thought in my "Kuhn and Critical thought", Philosophy of Education 1977, pp. 173-179; and have examined specific aspects of Kuhn's views on science education in my "Kuhn and Schwab on Science Texts and the Goals of Science Education", Educational Theory, Vol. 28, #4, Fall 1978, pp. 302-309, and "On the Distortion of the History of Science in Science Education", Science Education Vol. 63, #1, January 1979, pp. 111-118.

5. Israel Scheffler, Conditions of Knowledge (Illinois: Scott Foresman and Company, 1965), p. 107.

6. Fruitful expansion of this paragraph can be found in Scheffler, Reason and Teaching, pp. 76-80 and 142-143. A more detailed account of that aspect of critical thinking concerning the correct assessment of statements can be found in Robert H. Ennis, "A Concept of Critical Thinking", Harvard Educational Review, Vol. 32, Winter 1962, pp. 81-111. Ennis' treatment of critical thinking as the correct assessment of statements in that paper is more narrow than the conception being developed here, since that (latter) conception involves much more than the assessment of statements. Nevertheless, Ennis' treatment of that portion of critical thinking concerned with the assessment of statements is an illuminating and important one. Ennis has since moved beyond a concern for only the correct assessment of statements, and is currently engaged in the analysis of a conception of rational thinking which includes tendencies as well as proficiencies and is closer to the spirit of the present paper. Cf. Robert H. Ennis, "Presidential Address: A Conception of Rational Thinking", in Jerrold Coombs, ed., Philosophy of Education 1979, Bloomington, Illinois: Philosophy of Education Society, 1980, pp. 3-30.

7. A helpful discussion of critical spirit, as distinct from critical skill, can be found in John Passmore, "On Teaching To Be Critical", in R. S. Peters, ed., The Concept of Education (London: Routledge & Kegan Paul, 1967), pp. 192-211.

8. These points are developed more fully in Israel Scheffler's "Moral Education and the Democratic Ideal", reprinted in Scheffler, Reason and Teaching (op.cit., pp. 136-145). See also Scheffler, The Language of Education (Illinois: Charles C. Thomas, 1960), Chapter 5, esp. pp. 94-95; and my "Is It Irrational To Be Immoral? A Response to Freeman", Educational Philosophy and Theory, Vol. 10, #2, October 1978, pp. 51-61, and "Rationality, Morality, and Rational Moral Education: Further Response to Freeman", Educational Philosophy and Theory 1980 (forthcoming).

9. Scheffler, The Language of Education, p. 57, italics in original.

10. Scheffler, Conditions of Knowledge, p. 107. Further discussion of the critical manner of teaching as initiating the student into the rational life can be found in Scheffler, Conditions of Knowledge, pp. 11, 90, and 106-107; Reason and Teaching, pp. 1-3 and 76-80. Similar points, in a different context, concerning the manner of teaching are made by Leonard Joseph Waks, "Knowledge and Understanding As Educational Aims", The Monist 52 (1968), pp. 109-110.

11. Gilbert Ryle, The Concept of Mind (N. Y.: Barnes and Noble, 1949).

12. For a useful discussion of the analagous role of regulative ideals in science, see Carl R. Kordig, The Justification of Scientific Change (Boston: D. Reidel, 1971), esp. pp. 111-113.

13. Immanual Kant, Foundations of the Metaphysics of Morals, trans. Lewis White Beck (N. Y.: Bobbs-Merrill, 1959). The original Grundlegung Zur Metaphysik Der Sitten was published in 1785. An excellent contemporary discussion of Kant's conception of human dignity and the respect such dignity requires may be found in Hardy Jones, Kant's Principle of Personality (Madison: University of Wisconsin Press, 1971). See also Joel Feinberg, Social Philosophy (New Jersey: Prentice-Hall, 1973), pp. 84-97, and references to Vlastos and Williams therein, and the papers referred to in footnote 8 above.

14. Both "self-sufficiency" and "empowering" are terms suggested by Scheffler. See Reason and Teaching, Chapter 9, esp. pp. 123-125.

15. Scheffler, Reason and Teaching, p. 143.

16. ibid.

17. ibid., pp. 143-144.

18. Here, as earlier, empirical research is both appropriate and necessary to establish the claim.

19. Cf. R. S. Peters, "Education as Initiation", in R. D. Archambault, ed., Philosophical Analysis and Education (N. Y.: Humanities Press, 1972), pp. 87-111.

20. Scheffler, Reason and Teaching, p. 79, emphasis in original.

21. Though what follows is somewhat different from the content of our discussions, I am grateful to Zarina Patel, a former student, for bringing home to me the force of this objection.

22. Jonathon Kozol, "A New Look at the Literacy Campaign in Cuba", Harvard Educational Review, Vol. 48, No. 3, August 1978, pp. 341-377. Cited passage is from p. 364. Cf. also Kozol's reference to Bowles and Gintis, Illich, Katz, and Spring on that page.

23. It is perhaps worth pointing out that this claim is compatible with another, common claim, namely that moral education and political education cannot, practically speaking, be neatly separated.

24. Cf. note 19 above.

25. Kozol, "A New Look at the Literacy Campaign in Cuba", p. 364.

26. Scheffler, "Moral Education and the Democratic Ideal", esp. pp. 137-139 and 142-143.

27. A further problem for critical thinking is the following: is liberation, as conceived along the lines of critical thinking, the same as liberation as conceived by most political revolutioneries? After all, liberation as defended by Scheffler is of a piece with democratic society, while for many thinkers, liberation can proceed for persons and for nations even though those persons may live in nations which are openly undemocratic. While I have not argued the point here, I believe a case can conclusively be made that liberation along the lines of critical thinking is, ultimately, the only sort of liberation that can be rationally justified.

28. See, for instance, Robert H. Ennis, "Conceptualization of Children's Logical Competence: Piaget's Propositional Logic and an Alternative Proposal," in Alternatives to Piaget (N. Y.: Academic Press, 1977), pp. 201-260. Ennis' earlier "A Concept of Critical Thinking" (op. cit.) and recent Presidential Address (op.cit.) are also relevant here.

29. For a general overview of Philosophy for Children, see Metaphilosophy, vol. 7, No. 1, January 1976, which is devoted to Lipman's work.

Critical Thinking As An Educational Ideal

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Two-page Summary

In this paper I consider the educational ideal of critical thinking.

In the first section of the paper, an analysis of the ideal--a view of what the ideal comes to--is given. The analysis presented takes critical thinking to be an embodiment of the notion of rationality, and to be intimately connected with reasons. That is, a critical thinker is one who, among other things, recognizes the importance, and convicting force, of reasons in making judgments. A discussion of the specific aspects of reasons a thinker must grasp in order to be a critical thinker is given. Also, a discussion of the specific attitudes, dispositions, habits, and character tra ts necessary for critical thinking is given, under the heading of the "crit[illegible]ttitude" or "critical spirit." The ethical and epistemological ramifications for education of critical thinking are also discussed, as are the relationships of critical thinking to both the content and the manner of education.

Next is taken up the the question of the justifiability of taking critical thinking to be an educational ideal. Three specific justifications are presented: (1) It is argued that critical thinking, more than any other plausible educational ideal, recognizes and honors thr fundamental Kantian conception of respect for persons, and so is justifiable on moral grounds. (2) It is argued that critical thinking is a helpful way to conceptualize the educator's task of preparing students for adulthood by helping them to become self-sufficient.

(3) Finally, it is argued that critical thinking makes sense of the educator's task of introducing the student to the various traditions of knowledge which make up the standard curriculum areas.

Next, a political challenge to the ideal is considered: namely, that critical thinking is an unacceptable educational ideal because it masks unacceptable political assumptions. This challenge to critical thinking is explored, and found wanting.

Finally, ramifications of the acceptance of critical thinking as an educational ideal are discussed. These ramifications include suggestions for future educational research, and other practical matters, as well as some more removed, philosophical considerations.